217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- RENEWAL

PERMITTEE

Rohm and Haas Chemicals LLC
Attn: Richard Moss
1645 South Kilbourn Avenue
Chicago, Illinois 60623

Application No.: 96100074
Applicant's Designation:
Subject: Biocides
Date Issued: DRAFT
Location: 1645 South Kilbourn Avenue, Chicago, 60623

I.D. No.: 031600EPY
Date Received: December 13, 2004
Expiration Date:

This permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment identified in Attachment B, pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This federally enforceable state operating permit is issued:

i. To limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 ton/year of particulate matter less than 10 microns in diameter (PM_{10}), 100 tons/year of volatile organic material 10 tons/year for any individual Hazardous Air Pollutant (HAP), and 25 tons/year of any combination of such HAPs. As a result, the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit.

ii. This permit is issued based upon the plant not being subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart RR: Miscellaneous Organic Chemical Manufacturing Processes. This is consequence of the federally enforceable production and operating limitations, which restrict a potential to emit to less than 25 tons per year.

iii. To limit the potential emissions of VOM from the source to less than 25 tons/year. As a result, the source is excluded from the requirement of 35 Ill. Adm. Code Part 205, Emission Reduction Market System. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.

c. This permit supersedes all operating permit(s) for this location.

2a. Operation of solid biocide production equipment shall not exceed the following limits:

Throughput		VOM		PM-10	
(Ton/Mo)	(Ton/Yr)	(Lb/Mo)	(Ton/Yr)	(Lb/Mo)	(Ton/Yr)
8,400	100,800	333	2.0	1,667	10.0

These limits are based on material balance and 99.0% control efficiency.

b. Operation of liquid biocide production equipment shall not exceed the following limits:

		VOM		PM-10	
(Batches/Month)	(Batches/Year)	(Lb/Mo)	(Ton/Yr)	(Lb/Mo)	(Ton/Yr)
240	2,880	3,333	20.0	833	5.0

c. Operation of storage tanks TK-1 through TK-16 and TK-156 through TK-157 shall not exceed the following limits:

Combined Throughput (Gal/Yr)	VOM Emissions (Tons/Yr)
5,600,000	2.0

These limits are based on standard emission factors from AP-42 as calculated by the current TANKS program and using the maximum vapor pressure of the material stored in each tank.

d. Operation of boilers and hot oil heater shall not exceed the following limits:

	Firing Rate	E M I S S I O N S			
		NO_x	CO	VOM	PM-10
Equipment	(mmBtu/Hr)	(Ton/Yr)	(Ton/Yr)	(Ton/Yr)	(Ton/Yr)
Hot Oil Heater	5.14	2.25	1.89	0.12	0.17
Boiler #1	5.98	2.62	2.20	0.14	0.20
Boiler #2	5.98	2.62	2.20	0.14	0.20

These limits are based on AP-42 emission factors and 8,760 hours/year.

e. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months.

3. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish in rule which would require the Permittee to obtain a CAAPP permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA.

4. The Permittee shall conduct a monthly visual inspection and maintenance of each baghouse to ensure proper working condition and compliance with the control efficiencies in this permit.

5a. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

b. The Permittee shall maintain monthly records of the following items:

i. Pursuant to 35 Ill. Adm. Code 218.129(f), the owner or operator of each storage vessel shall maintain readily accessible records of the dimension of the storage vessel and an analysis of the capacity of the storage vessel. Each storage vessel with a design capacity less than 40,000 gallons is subject to no provisions of 35 Ill. Adm. Code Part 218 other than those required by maintaining readily accessible records of the dimensions of the storage vessel and analysis of the capacity of the storage vessel.

ii. Solid biocide material throughput (ton/month);

iii. Liquid biocide batches (batches/month);

iv. Storage tanks TK-1 through TK-16 and TK-156 through TK-157 throughput (gallons/month);

v. Boilers and hot oil heater fuel type and quantity used

(gallons/month or mmscf/month);

vi. Name and amount of VOM and HAP containing materials used including VOM and HAP content (% by wt. and lb/month);

vii. Monthly and annual emissions of NOx, PM, PM_{10}, VOM, and HAPs (tons/mo and tons/yr) with supporting calculations in order to demonstrate compliance with the emission limitations included within this Permit.

b. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

7. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

8. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016

If you have any questions on this, please call Ernie Kierbach at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:ELK:lsm

cc: IEPA, FOS Region 1
Lotus Notes

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emission from the Biocide Manufacturing Plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario that results in maximum emissions from such a plant. This is use of 5,500 tons of VOM in raw materials per year. The resulting maximum emissions are below the levels, e.g., 100 tons per year of VOM, 10 tons per year for a single HAP, and 25 tons per year for totaled HAP at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Additionally maximum emissions of VOM are below the 25 tons per year to remain below 35 IAC 218 Subpart RR applicability levels. Actual emissions from this source will be less than predicted in this summary to the extent that material is handled, and control measures are more effective than required in this permit.

	E M I S S I O N S (Tons/Year)					
Emission Unit	CO	NO_x	PM_{10}	VOM	Single HAP	Combined HAPs
Solid biocide production equipment			10.0	2.0		
Liquid biocide production equipment			5.0	20.0		
Storage tanks TK-1 thru TK-16 and TK-156 thru TK-157				2.0		
Hot Oil Heater	1.89	2.25	0.17	0.12		
Boiler #1	2.20	2.62	0.20	0.14		
Boiler #2	2.20	2.62	0.20	0.14		
Totals	6.29	7.49	15.57	24.40	< 10	< 25

Attachment B

EMISSION UNIT SUMMARY

1. Process Category: Liquid Biocide Production

Associated Pollution Control Equipment: Tywood Scrubber and Dust Collector (DC-1), as noted

Process Equipment/Emission Units:

Emission Unit Description	Designation	Control Equipment
Kettle-1	K-1	Tywood Scrubber, DC-1
Kettle-2	K-2	Tywood Scrubber, DC-1
Kettle-3	K-3	Tywood Scrubber
Kettle-4	K-4	Tywood Scrubber, DC-1
Plate Filter	FI-401	Tywood Scrubber
Steam Jacket Kettle	SJ-1	Tywood Scrubber
Kettle-5	K-5	Tywood Scrubber, DC-1
Mix Tank-17	TK-17	Tywood Scrubber
Mix Tank-201	TSS-201	Tywood Scrubber, DC-1
Mix Tank-202	TSS-202	Tywood Scrubber, DC-1
Kettle-6	K-6	Tywood Scrubber
Mix Tank-601	TSS 601	Tywood Scrubber
Mix Tank-3	M-3	None
Mix Tank-4	M-4	None
Kettle-8	K-8	None
Drumming Station	NA	Tywood Scrubber
Tank Wagon Loading Station	NA	None
Mix Tank –18	TK-18	DC-1
Mix Tank-19	TK-19	None
Kettle-20	K-20	None

2. Process Category: Solid Biocide Production:

Associated Pollution Control Equipment: Dust Collectors (as noted)

Process Equipment/Emission Units:

Equipment Description	New FESOP I.D.	Old I.D.
Extruder-2	EX-2	PP-101
Bulk Resin Silo #1 Dust Collector	DC-101	DC-101
Bulk Resin Silo #2 Dust Collector	DC-102	DC-102

Attachment B
(Continued)

Equipment Description	New FESOP I.D.	Old I.D.
Resin Feeder Dust Collector	DC-103	DC-103
Purge Bag Dump Dust Collector	DC-104	DC-104
Resin Bag Dump Dust Collector	DC-106	DC-106
Resin Bag Dump Dust Collector	DC-108	DC-108
Purge Feeder Dust Collector	DC-105	DC-105
Resin Feeder Dust Collector	DC-107	DC-107
Resin Feeder Dust Collector	DC-109	DC-109
Resin Feeder Dust Collector	DC-110	DC-110
Drum Dump Dust Collector	DC-111	DC-111
Resin Feeder Dust Collector	DC-112	DC-112
Storage Silo #1 Dust Collector	DC-113	DC-113
Storage Silo #2 Dust Collector	DC-114	DC-114
Material Receiver #1 Dust Collector	DC-115	DC-115
Material Receiver #2 Dust Collector	DC-116	DC-116
Central Vacuum System Dust Collector	DC-117	DC-117
Extruder-1	EX-1	SB-1-PR
Extruder-1 Dust Collector	DC-3	DC-3
Parts Cleaning Oven	NA	NA

3. Process Category: Storage Tanks

Associated Pollution Control Equipment: Conservation Vents (as noted)

Process Equipment/Emission Units:

Tank Description	Tank I.D.	Conservation Vent
Storage Tank	TK-1	Yes
Storage Tank	TK-2	No
Storage Tank	TK-3	No
Storage Tank	TK-4	No
Storage Tank	TK-5	Yes
Storage Tank	TK-6	Yes
Storage Tank	TK-7	No
Storage Tank	TK-8	No
Storage Tank	TK-9	No
Storage Tank	TK-10	No
Storage Tank	TK-14	No
Storage Tank	TK-15	No
Storage Tank	TK-16	No
Storage Tank	TK-156	No
Storage Tank	TK-157	No

4. Process Category: Combustion Equipment

Associated Pollution Control Equipment: None

Process Equipment/Emission Units:

Two (2) steam generating boilers - 5.98 mmBtu/hr each, natural gas
One (1) Oil heating unit - 5.14 mmBtu/hr, natural gas